## ABSTRACT

Limiting or controlling access to various services thereby performing a firewall function. An access

5 router may permit or deny a packet based on at least a portion of a unique bit string (or context information) which replaced layer 2 header information (e.g., the layer 2 (e.g., MAC) address). Further, a particular quality of service may be indicated by at least a part of the unique

10 bit string (or context information). The service provided to a group of customers, that group of customers being defined by at least a portion of the unique bit string (or context information), may be monitored. Multicast groups may be supported by checking at least a part of the unique

15 bit string (or context information) to determine whether or not a customer associated with that port is permitted to join the multicast group.